REMARKS

Claims 12-31 are pending in this Application. By this Amendment, claims 12 and 19 have been amended to incorporate the features of claims 15 and 25, respectively. Claims 21, 23 and 28 have been amended to improve the form of the claims. Claims 15 and 25 have been canceled. No new matter has been added as a result of this amendment.

Claim Rejections

Rejections Under 35 U.S.C. § 103

A. Response to rejection of claims 12-31 under 35 U.S.C. 103(a) as being unpatentable over Saito et al. in view of Charlier et al.

In response to the rejection of claims 12-31 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,560,886 of Saito et al. ("Saito") in view of U.S. Patent Number 6,669,919 of Charlier et al. ("Charlier"), Applicants submit that a *prima facie* case of Obviousness has not been made out and traverse the rejection.

With respect to a rejection under 103(a), the U.S. Supreme Court in *Graham v. John Deere Co.*, 148 U.S.P.Q. 459 (1966) held that non-obviousness was determined under §103 by (1) determining the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; (3) resolving the level of ordinary skill in the art; and, (4) inquiring as to any objective evidence of non-obviousness. Accordingly, for the Examiner to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. See MPEP §2143. Finally, all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. (BNA) 580 (C.C.P.A. 1974).

The Examiner has acknowledged that "Saito et al teaches irradiating at an absorbed dosage or 3.0 kGy under the conditions of an accelerated voltage of 2 MV and an electric current of 1.0 mA at a temperature of 20°C, which is outside of the instantly claimed conditions." (emphasis added). Nevertheless, the Examiner attempts to utilize Charlier to remedy the

deficiencies of Saito. However, Saito specifically warns against operation at the higher radiation levels suggested by the Examiner:

> As to the irradiation of the ionizing radiations to the mixture of the linear polypropylene with the cross-linking auxiliary, a range of the amount of radiations in a range of 0.1 to 20 kGy is suitable, and a range of 0.2 to 15 kGy is preferable, and that of 0.5 to 10 kGy is more preferable.
>
> If the amount of absorbed radiations is small, the improvement in the melt tension of the modified polypropylene is insufficient, while if the amount is large, gels occur in the resulting modified polypropylene. Thus, either of the cases are outside the range of the present invention. (col. 7, lines 4-13; emphasis added)

The current claims recite a process for producing a polypropylene having increased melt strength comprising irradiating a polypropylene in pellet form in the presence of air with an electron beam having an energy within the range of 0.5 to 25 MeV delivered by an accelerator having a power within the range of 50 to 1000 kW and with a radiation dose within the range of 40 to 100 kGray. The lower limit of the claimed radiation dose (40 kGray) is therefore double that of the upper limit disclosed in Saito (20 kGy). Clearly, the Examiner's proposed modification would render Saito unsuitable for its intended purpose (*see* MPEP 2143.01(V)), by producing an irradiated polymer with unacceptably high gel content. In fact, Saito actually teaches away from the proposed modification. Therefore, a *prima facie* case of Obviousness has not been made out by the Examiner. Reconsideration and withdrawal of the Rejection respectfully is requested.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. Should the Examiner have questions or comments regarding this application or this Amendment, Applicant's attorney would welcome the opportunity to discuss the case with the Examiner.

The Commissioner is hereby authorized to charge U.S. PTO Deposit Account 08-2336 in the amount of any fee required for consideration of this Amendment.

This is intended to be a complete response to the Office Action mailed April 2, 2008.

Respectfully submitted,

William R. Reid
Registration No. 47,894
Attorney for Applicant

I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 12, 2008.

August 12 2008
Date of Signature

Basell USA Inc.
Delaware Corporate Center II
2 Righter Parkway, Suite 300
Wilmington, DE 19803 USA
Attorney's Telephone No.: 302-683-8178
Attorney's Fax No.: 302-731-6408